

IN THE CLAIMS:

Claims 2, 3, 8, 9, 13, 15, 18 - 20, 24, and 27 - 29 have been cancelled. Claims 1, 7, 14, 16, 23, 25, and 30 - 31 have been amended.

1. (currently amended) A remote virtual network interface, comprising:
  - an Ethernet receiving element connected to and in communication with an Ethernet ~~[[node]]~~ switch;
  - an Ethernet transmitting element connected to and in communication with the Ethernet ~~[[node]]~~ switch;
  - an InfiniBand receiving element to receive a data packet from a first InfiniBand node, wherein the data packet includes a destination indicator media access control (MAC) address;
  - a detector to read the destination indicator MAC address and to compare the destination indicator to a ~~known value~~ range of MAC addresses to determine where to transmit the data packet; ~~[[and]]~~
  - a routing element to deliver the data packet from the ~~InfiniBand-receiving element to the detector to~~ an InfiniBand transmitting element, wherein the InfiniBand transmitting element transmits the data packet ~~from the first InfiniBand node to a second InfiniBand node~~ if the destination MAC address is within the range of MAC addresses; and
  - an Ethernet transmitting element to deliver the data packet from the detector to the Ethernet switch if the destination MAC address is not within the range of MAC addresses.

Claims 2 and 3 (cancelled).

4. (original) The remote virtual network interface according to claim 1, wherein the detector and the routing element are within a single device.

5. (original) The remote virtual network interface according to claim 1, wherein the remote virtual network interface is virtualized by implementing microcode in a network processor.

6. (original) The remote virtual network interface according to claim 1, wherein the remote virtual network interface is virtualized by implementing microcode in a set of integrated circuits.

7. (currently amended) A network system, comprising:

- an Ethernet node ~~to receive a first data packet from a remote virtual network interface;~~
- an Ethernet switch ~~to select the Ethernet node to receive a second data packet;~~
- a first InfiniBand node to transmit a data packet ~~to the remote virtual network interface,~~ wherein the data packet includes a destination indicator media access control (MAC) address; and
- an InfiniBand switch ~~to select a second InfiniBand node to receive the data packet from the first InfiniBand node, wherein the remote virtual network interface includes~~ receive the data packet from the first Infiniband node and to transmit the data packet; and
- a remote virtual network interface, the remote virtual network interface including
  - an Ethernet receiving element ~~in communication with~~ connected to the Ethernet ~~[[node]] switch,~~

an Ethernet transmitting element ~~in communication with the~~ connected to  
the Ethernet [[node]] switch,

an InfiniBand receiving element to receive the data packet from the first  
InfiniBand [[node]] switch,

a detector to read the destination indicator MAC address of the data  
packet and to compare the destination indicator to a ~~known value~~ range of MAC  
addresses,

a routing element to receive the data packet from the detector and to  
~~deliver~~ transmit the data packet ~~from the first InfiniBand node to the second~~  
~~InfiniBand node,~~ and

an InfiniBand transmitting element to receive the data packet and to  
transmit the data packet ~~from the first InfiniBand node to the second InfiniBand~~  
node.

Claims 8 and 9 (cancelled).

10. (previously presented) The network system according to claim 7, wherein  
the detector and the routing element are within a single device.

11. (previously presented) The network system according to claim 7, wherein  
the remote virtual network interface is virtualized by implementing microcode in a  
network processor.

12. (previously presented) The network system according to claim 7, wherein  
the remote virtual network interface is virtualized by implementing microcode in a set of  
integrated circuits.

Claim 13 (cancelled)

14. (currently amended) A method of routing a data packet ~~from a first InfiniBand node to a second InfiniBand node~~, comprising:

- ~~providing Ethernet connectivity to the first InfiniBand node and to the second InfiniBand node;~~
- receiving a data packet from ~~[[the]]~~ a first InfiniBand node, at a remote virtual network interface device connected to an Infiniband switch and an Ethernet switch,
- wherein the data packet includes a destination indicator media access control (MAC) address;
- reading the destination indicator MAC address;
- comparing the destination MAC address to a range of MAC addresses;
- ~~indicating by the destination indicator that the data packet is to be delivered to the second InfiniBand node; and~~
- delivering transferring the data packet to [[the]] a second InfiniBand node if the destination address of the data packet is within the range of the MAC addresses; and
- delivering the data packet to the Ethernet switch if the destination address of the data packet is not within the range of the MAC addresses.

Claim 15 (cancelled).

16. (currently amended) The method according to claim 14, wherein the reading of the destination indicator MAC address and the comparing of the destination MAC address is performed by a detector.

17. (original) The method according to claim 14, wherein the delivering of the data packet to the second InfiniBand node is performed by a routing element.

Claims 18 - 20 (cancelled).

21. (previously presented) The method according to claim 14, wherein the method further includes virtualizing the remote virtual network interface by implementing microcode in a network processor.

22. (previously presented) The method according to claim 14, wherein the method further includes virtualizing the remote virtual network interface by implementing microcode in a set of integrated circuits.

23. (currently amended) A program code storage device, comprising:  
a machine-readable storage medium; and  
machine-readable program code, stored on the machine-readable storage medium, the machine-readable program code having instructions, which when executed cause a computing device to

~~provide Ethernet connectivity to a first InfiniBand node and to a second InfiniBand node,~~

receive a data packet from ~~[[the]]~~ a first InfiniBand node, at a remote virtual network interface device connected to an Infiniband switch and an Ethernet switch,  
wherein the data packet includes a destination indicator media access control (MAC) address;[[,]]

read the destination indicator MAC address[[,]] ;

compare the destination MAC address to a range of MAC addresses;

~~indicate by the destination indicator that the data packet is to be delivered to the second InfiniBand node, and~~

~~deliver~~ transfer the data packet to ~~[[the]]~~ a second InfiniBand node if the  
destination address of the data packet is within the range of the MAC addresses; and  
deliver the data packet to the Ethernet switch if the destination address of the  
data packet is not within the range of the MAC addresses..

Claim 24 (cancelled).

25. (currently amended) The program code storage device according to claim 23, wherein a detector reads the destination indicator MAC address.

26. (previously presented) The program code storage device according to claim 23, wherein a routing element delivers the data packet to the second InfiniBand node.

Claims 27 - 29 (cancelled)

30. (currently amended) The program code storage device according to claim ~~[[24]]~~ 23, wherein the remote virtual network interface is virtualized by implementing microcode in a network processor.

31. (currently amended) The program code storage device according to claim ~~[[24]]~~ 23, wherein the remote virtual network interface is virtualized by implementing microcode in a set of integrated circuits.